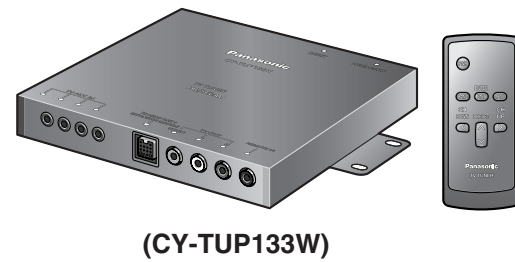


Panasonic

TV Tuner
ТВ-тюнер
TV 튜너

CY-TUP133W CY-TUN133W

Operating Instructions
Инструкция по эксплуатации
사용 설명서



(CY-TUP133W)



- Please read these instructions carefully before using this product and keep this manual for future reference.
- Перед началом эксплуатадии просим прочитать настоящую инструкцию внимательно и хранить ее на пользование на будущее.
- 본 제품의 바른 사용을 위해, 이 사용설명서를 잘 읽어 주십시오.
잘 보관하시어 필요하실 때마다 읽어주시기 바랍니다.

Safety Information

1

- ❑ Read the operating instructions for the unit and all other components of your car audio system carefully before using the system. They contain instructions about how to use the system in a safe and effective manner. Panasonic assumes no responsibility for any problems resulting from failure to observe the instructions given in this manual.



Warning

This pictograph intends to alert you to the presence of important operating instructions. Failure to heed the instructions may result in severe injury or death.



Caution

This pictograph intends to alert you to the presence of important operating instructions. Failure to heed the instructions may result in injury or material damage.

This unit cannot be operated alone.

This unit is designed for users to connect one or more system devices to Panasonic car audio/AV unit at the same time. For more details about safety information, refer to the operating instructions for the connected devices.

Warning

Observe the following warnings when using the unit.

- ❑ **The driver should neither watch the display nor operate the system while driving.**
Watching the display or operating the system will distract the driver from looking ahead of the vehicle and can cause accidents. Always stop the vehicle in a safe location and use the parking brake before watching the display or operating the system.
- ❑ **Use the proper power supply.**
This product is designed for operation with a negative grounded 12 V DC battery system. Never operate this product with other battery system, especially a 24 V DC battery system.
- ❑ **Keep a battery away from children to avoid the risk of accidents. If an infant ingests a battery, please seek immediate medical attention.**
Batteries and insulation film can be ingested, so keep them out of the reach of infants. If an infant ingests a battery or insulation film, please seek immediate medical attention.

- ❑ **Do not disassemble or modify the unit.**
Do not disassemble, modify the unit or attempt to repair the product yourself. If the product needs to be repaired, consult your dealer or an authorised Panasonic Service Center.
- ❑ **Do not use the unit when it is out of order.**
If the unit is out of order (no power, no sound) or in an abnormal state (has foreign objects in it, is exposed to water, is smoking, or smells), turn it off immediately and consult your dealer.
- ❑ **The remote control unit should not lie about in the car.**
If the remote control unit lies about, it could fall on the floor while driving, get wedged under the brake pedal, and lead to a traffic accident.
- ❑ **Refer fuse replacement to qualified service personnel.**
When the fuse blows out, eliminate the cause and have it replaced with the fuse prescribed for this unit by a qualified service engineer. Incorrect replacement of the fuse may lead to smoke, fire, and damage to the product.
- ❑ **When you connect external devices (option), be sure to connect the parking brake (side brake) connection lead.**
- ❑ **To ensure safety, never attempt to preset channels while you are driving.**

2

Warning

Observe the following warnings when installing.

- ❑ **Disconnect the lead from the negative (–) battery terminal before installation.**
Wiring and installation with the negative (–) battery terminal connected may cause electrical shock and injury due to a short circuit.
Some cars equipped with the electrical safety system have specific procedures of battery terminal disconnection.
FAILURE TO FOLLOW THE PROCEDURE MAY LEAD TO THE UNINTENDED ACTIVATION OF THE ELECTRICAL SAFETY SYSTEM RESULTING IN DAMAGE TO THE VEHICLE AND PERSONAL INJURY OR DEATH.
- ❑ **Never use safety-related components for installation, grounding, and other such functions.**
Do not use safety-related vehicle components (fuel tank, brake, suspension, steering wheel, pedals, airbags, etc.) for wiring or fixing the product or its accessories.
- ❑ **Installing the product on the air bag cover or in a location where it interferes with airbag operation is prohibited.**
- ❑ **Check for piping, gasoline tank, electric wiring, and other items before installing the product.**
If you need to open a hole in the vehicle chassis to attach or wire the product, first check where the wire harness, gasoline tank, and electric wiring are located. Then open the hole from outside if possible.
- ❑ **Never have the power cord branched to supply other equipment with power.**
- ❑ **After installation and wiring, you should check the normal operation of other electrical equipment.**
The continuation of their using in abnormal conditions may cause fire, electrical shock or a traffic accident.
- ❑ **In the case of installation to an airbag-equipped car, confirm warnings and cautions of the vehicle manufacturer before installation.**
- ❑ **Make sure the leads do not interfere with driving or getting in and out of the vehicle.**
- ❑ **Insulate all exposed wires to prevent short circuiting.**
- ❑ **Never try to repair the unit by yourself because it is dangerous to do so.**

Safety Information (continued)

3

⚠ Caution

Observe the following cautions when using this unit.

- ❑ This unit is designed for use exclusively in automobiles.
- ❑ Do not operate the unit for a prolonged period with the engine turned off.
Operating the audio system for a long period of time with the engine turned off will drain the battery.
- ❑ Do not expose the unit to direct sunlight or excessive heat.
Otherwise these will raise the interior temperature of the unit, and it may lead to smoke, fire, or other damage to the unit.
- ❑ Do not use the product where it will be exposed to water, moisture, or dust.
Exposure of the unit to water, moisture, or dust may lead to smoke, fire, or other damage to the unit. Make especially sure that the unit does not get wet in car washes or on rainy days.

⚠ Caution

Observe the following cautions when installing.

- ❑ If your car is equipped with air bag and/or anti-theft systems specific procedures may be required for connection and disconnection of the battery to install this product.
- ❑ FAILURE TO FOLLOW THE PROCEDURE MAY RESULT IN THE UNINTENDED DEPLOYMENT OF AIR BAGS OR ACTIVATION OF THE ANTI-THEFT SYSTEM RESULTING IN DAMAGE TO THE VEHICLE AND PERSONAL INJURY.
- ❑ Refer wiring and installation to qualified service personnel.
Installation of this unit requires special skills and experience. For maximum safety, have it installed by your dealer. Panasonic is not liable for any problems resulting from your own installation of the unit.
- ❑ Follow the instructions to install and wire the product.
Not following the instructions to properly install and wire the product could cause an accident or fire.
- ❑ Take care not to damage the leads.
When wiring, take care not to damage the leads. Prevent them from getting caught in the vehicle chassis, screws, and moving parts such as seat rails. Do not scratch, pull, bend or twist the leads. Do not run them near heat sources or place heavy objects on them. If leads must be run over sharp metal edges, protect the leads by winding them with vinyl tape or similar protection.
- ❑ Use the designated parts and tools for installation.
Use the supplied or designated parts and appropriate tools to install the product. The use of parts other than those supplied or designated may result in internal damage to the unit. Faulty installation may lead to an accident, a malfunction or fire.
- ❑ Do not install the product where it is exposed to strong vibrations or is unstable.
Avoid slanted or strongly curved surfaces for installation. If the installation is not stable, the unit may fall down while driving and this can lead to an accident or injury.
- ❑ Wear gloves for safety. Make sure that wiring is completed before installation.
- ❑ To prevent damage to the unit, do not connect the power connector until the whole wiring is completed.

- ❑ Never mount the unit in any of the following locations to avoid damage due to overheating;
 - Near the heater port.
 - Places like the dashboard or rear deck, where it may be exposed to direct sunlight.
- ❑ Do not mount the unit near the door, where it could be exposed to rain.
- ❑ You run the risk of interfering with the mounting or causing damage by drilling into the gas tank, a wiring harness, or other component.
- ❑ Note that if your car has a driving computer or a navigation computer, disconnecting the cable from the battery may clear the memory.
- ❑ Fit a vinyl cap over unused connection terminals, to prevent contact with metal parts etc.

Observe the following cautions when handling the batteries for the remote control unit.

Proper Use of the Batteries

- Use only specified battery (CR2025).
- Match the polarity of the battery with the (+) and (–) marks in the battery case.
- Replace a dead battery as soon as possible.
- Remove the battery from the remote control unit when not using it for an extended period of time.
- Insulate the battery (by placing them in a plastic bag or covering them with vinyl tape) before disposal or storage.
- Do not disassemble, recharge, heat or short the battery. Do not throw a battery into a fire or water.
- Follow local regulations when disposing of a battery.
- Improper use of a battery may cause overheating, an explosion or ignition, resulting in injury or a fire.

In case of battery leakage

- Thoroughly wipe the battery liquid off the battery case and insert new battery.
- If any part of your body or clothing comes into contact with battery liquid, wash it with plenty of water.
- If battery liquid comes into contact with your eyes, wash them with plenty of water and get immediate medical attention.

4

Please follow the laws and regulations of your province or country for installation of the unit.

Connection of Parking (Side) Brake Connecting Lead



This system is designated so that you cannot see TV or motion pictures while you are driving.

- Park your car in a safe and pull the parking brake (side brake) lever before watching the monitor.
- If a rear monitor (option) is connected to this unit, you can continually see the rear monitor image even if the parking brake (side brake) has not been pulled on.

⚠ Warning

When you connect external devices (option), be sure to connect the parking brake (side brake) connection lead. (page 21)

Note:

- Only English is displayed on the OSD screen.

Before Reading These Instructions

Panasonic welcomes you to our constantly growing family of electronic products owners. We endeavor to give you the advantages of precise electronic and mechanical engineering, manufactured with carefully selected components, and assembled by people who are proud of the reputation their work has built for our company. We know this product will bring you many hours of enjoyments, and after you discover the quality, value and reliability we have built into it, you too will be proud to be a member of our family.

Differences between 2 Models

This Operating instruction manual is for 2 models CY-TUP133W and CY-TUN133W. All illustrations throughout this manual represent model CY-TUP133W unless otherwise specified. The following table describes the differences between 2 models.

Features \ Models	CY-TUP133W	CY-TUN133W
Receiving system	Compatible with both PAL and SECAM	NTSC
AREA SELECT display when turning power on for the first time	TV reception area is consisted of 12 group. Select the group where you operate this unit. (page 8)	No
TV AREA (Country) Setting	TV AREA: TV reception area is consisted of 12 group. (page 8)	No

This unit is not compatible with digital television broadcasts. (page 30)
For more information on digital television broadcasts, refer to publications from national governments and television stations.

Features

This unit cannot be operated alone.
This unit is designed for users to connect one or more system devices to Panasonic car audio/AV unit at the same time.
Head Unit (option):
CQ-VD7003W, CQ-VD6503W, etc.

Can be combines with Panasonic Expansion Module (CY-EM100N, option) and other optional devices.

Compatible with both receiving systems PAL or SECAM (Only for CY-TUP133W)

Receiving NTSC video system only (Only for CY-TUN133W)

4ch Diversity TV Antenna system

12 Preset channels for each bands
Favorite channels can be written after you have set the preset channel once.
Channels can also be deleted from the presets when no longer required.

Note:
• Market conditions regarding optional devices vary with countries and regions. For further information, consult your dealer.

Contents

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Preparation

7

TV AREA (Country) Setting (Only for CY-TUP133W)

Before settings:

- 1 Install and connect the Head Unit, optional devices and this unit.
- 2 Mount the TV antenna. (page 22)
- 3 Turn the power on and select the group on AREA SELECT display.
- 4 Set the DIVER (Diversity) Antenna to "ON". (page 10)
- 5 Confirm the electrical connection and video signal of the connected devices.

Group and TV AREA (Country)

Group	TV AREA (Country)
GROUP1	Algeria, Bahrain, Ghana, India, Israel, Jordan, Kenya, Kuwait, Liberia, Malaysia, Maldives, Nigeria, Oman, Pakistan, Qatar, Singapore, Srilanka, Sudan, Thailand, UAE, Uganda, Yemen, Zambia
GROUP2	Russia
GROUP3	Italy
GROUP4	Rumania, Hungary, Czech
GROUP5	Ireland
GROUP6	Hong Kong
GROUP7	Angola
GROUP8	Australia
GROUP9	China
GROUP10	Indonesia
GROUP11	New Zealand
GROUP12	South Africa

Note:

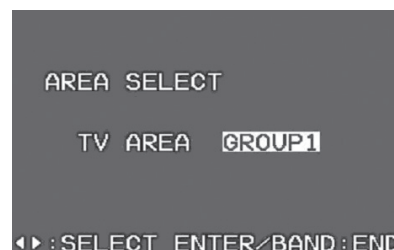
- Only English is displayed on the OSD screen.
- AREA SELECT can be used to select countries other than those where the product is distributed, but this product is not compatible with those countries. (They are shaded gray in the list.)

When the turn the power on for the first time, AREA SELECT (TV AREA (Country) Setting) display appears.

See the left table to select the group where you operate this unit.

TV AREA:

TV reception area is consisted of 12 group.



- 1 Press [<] or [>] to select the group included your country. (See the left table.)
- 2 Press [ENT] (ENTER) or [MENU] to set.

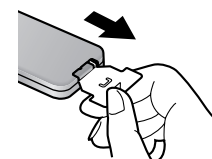
To select the group again:

Set the TV AREA (country) setting by pressing MENU. Refer to page 15.

Remote Control Unit

Preparation Before Initial Use

Pull the insulation film out from the backside of remote control gently.



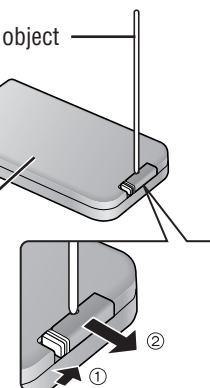
Battery Replacement

- 1 Remove the battery holder with the remote control unit placed on a flat surface.
 - 1 Stick your thumbnail into the groove, and push the holder in the direction of the arrow at the same time.

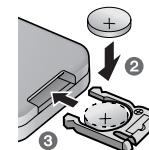
Tough pointed object

- 2 Pull it out in the direction of the arrow using a tough pointed object.

Back side



- 2 Put a battery in the case with (+) side facing up.
- 3 Put the case back.



Warning

- Keep a battery away from children to avoid the risk of accidents. If an infant ingests a battery, please seek immediate medical attention.

Caution

- Remove and dispose of an old battery immediately.
- Do not disassemble, heat or short a battery. Do not throw a battery into a fire or water.
- Follow local regulations when disposing of a battery.
- Improper use of a battery may cause overheating, an explosion or ignition, resulting in injury or a fire.

Components

8

Item	Diagram	Qty.
TV Tuner		1
Remote Control Unit (EUR7641040)		1
Lithium Battery for Remote Control Unit (Included in the remote control) <CR2025/1F>		1
Operating Instructions (YFM284C549ZA)		1
Installation Hardware (screws, cords, etc.) (page 19)		

Note:

- The number in parenthesis underneath each accessory part name is the part number for maintenance and service.
- Accessories and their parts numbers are subject to modification without prior notice due to improvements.

Note:

- Battery Information:
 Battery Type: Panasonic lithium battery (CR2025)
 (Included in the remote control)
 Battery Life: Approximately 6 months under normal use (at room temperature)

Diversity TV Antenna

9

Diversity TV Antenna:

Of the two antennae connected to the system, the one with the best reception is automatically selected for TV reception. Turning DIVER (Diversity) setting to "ON" reduces noise.

To make effective use of this diversity function:

- 1 Connect both two TV antennae provided.
- 2 Turn DIVER (Diversity) setting to "ON".

Note:

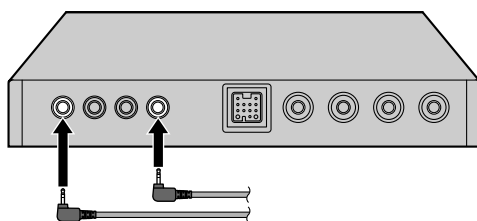
- If only one is connected, the diversity function has no effect.

To use the two optional antennae

Two antennae must be prepared.

- 1 Plug the four terminals for the two antennae into the tuner. Combine the tuner TV terminals and the antenna terminals as shown on page 22.

How to plug the antennae in when there is only one antenna terminal.



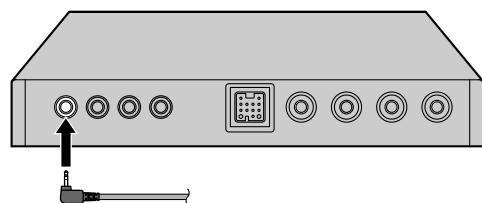
- 2 Make sure the DIVER (Diversity) setting is "ON".

Note:

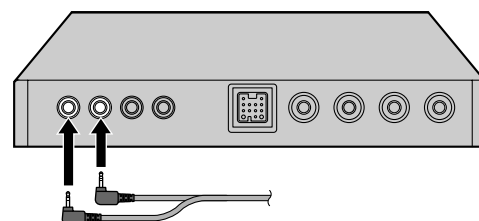
If there is no alternative but to use only one optional TV antenna, the diversity function has no effect.

1. The way to plug the antennae varies with the number of antenna terminals.

How to plug the antennae in when there is only one antenna terminal.



How to plug the antennae in when there are two terminals.



2. Make sure the DIVER (Diversity) setting is "OFF".

DIVER (Diversity) Antenna Setting

Confirm "ON" to receive a good reception.

Default: ON

Setting: ON/OFF

- 1 Press [PWR] (Power).
- 2 Press [MENU].



- 3 Press [^] or [v] to select "DIVER". (Only for CY-TUP133W)
- 4 Press [<] or [>] to select "ON" or "OFF".
- 5 Press [ENT] (ENTER) or [MENU] to set and return to the previous display.

Recommended System and Operation

10

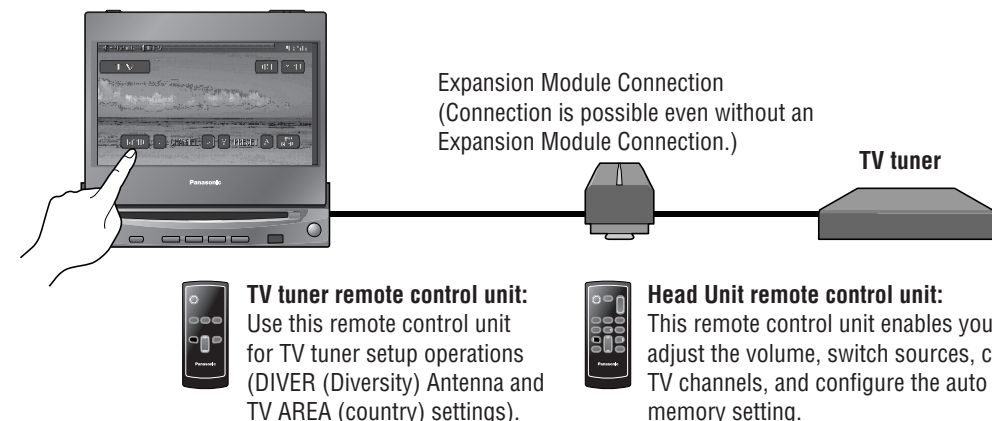
We recommend using this TV tuner with the Panasonic Head Unit below.

For details on the Head Unit and Head Unit remote control operations, refer to the operating instructions for the Head Unit.

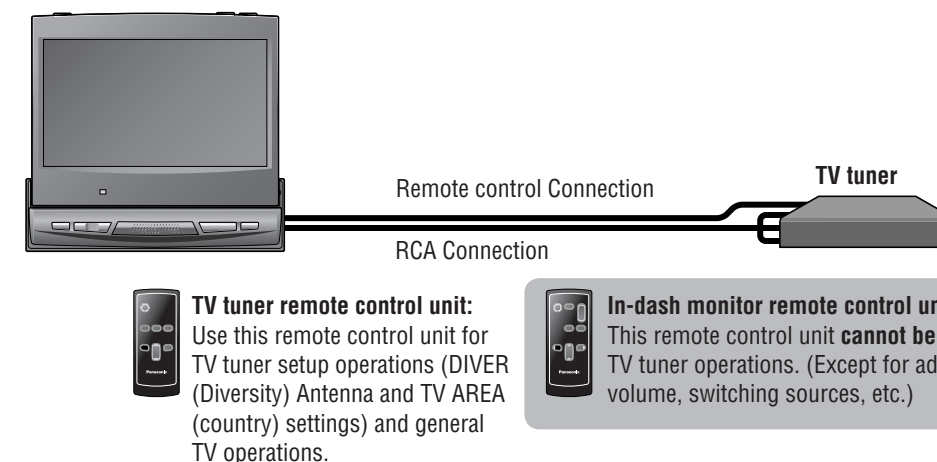
Head Unit with Touch Panel Control (CQ-VD7003W, CQ-VD6503W), Expansion Module (CY-EM100N) and TV Tuner

Use the Head Unit touch panel to operate the TV tuner.

For details on the touch panel and remote control operations, refer to the chapter on TV operations in the operating instructions for the Head Unit.



In-dash Monitor (CY-VM7203W) and TV Tuner



For connection configurations other than the recommended connection configurations above, refer to the following pages.

- Head Unit (CQ-VD7001W): Page 27
- The remote control units supplied with the Head Unit and Rear Monitor cannot be used for TV tuner operations. (Except for adjusting the volume, switching sources, etc.)

Combination of this TV tuner with the non-Panasonic Head Unit (in-car audio system with a monitor/AV unit):

It will not be possible to operate this TV tuner with a remote control unit, or that of the non-Panasonic Head Unit.

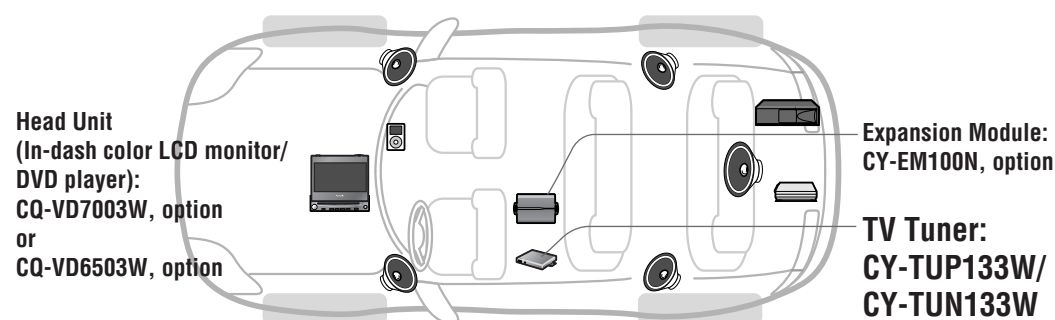
Recommended System and Operation (continued)

This unit cannot be operated alone.

This unit is designed for users to connect one or more system devices to Panasonic car audio/AV unit at the same time. For more details, refer to the operating instructions for the connected devices.

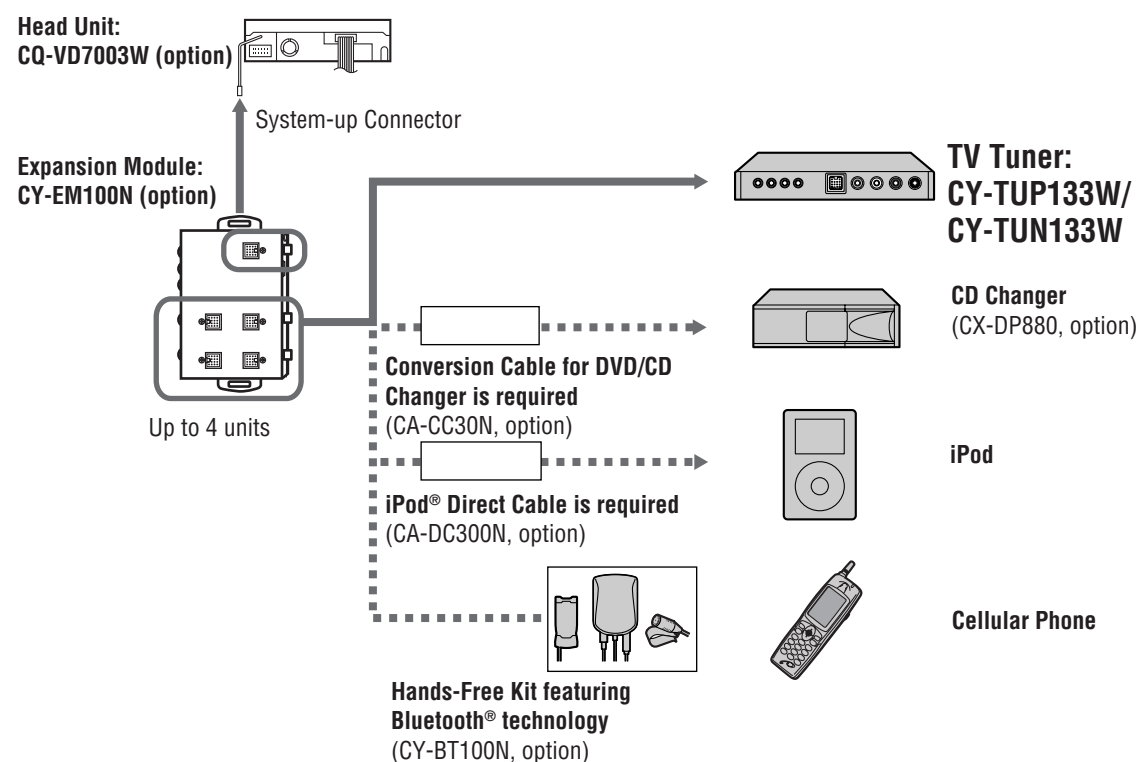
System Connection Example

Head Unit with Touch Panel Control (CQ-VD7003W, CQ-VD6503W),
Expansion Module (CY-EM100N) and TV Tuner

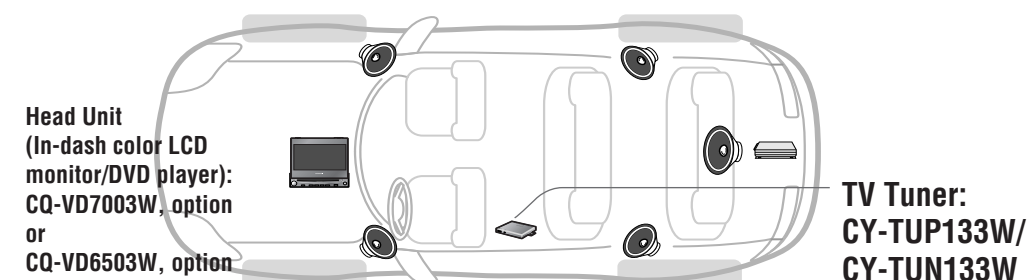


Note:

- Connect this unit to the Expansion Module (CY-EM100N, option) with the Head Unit/Expansion Module Connecting Cable and RCA cord (video) (supplied). (page 23)



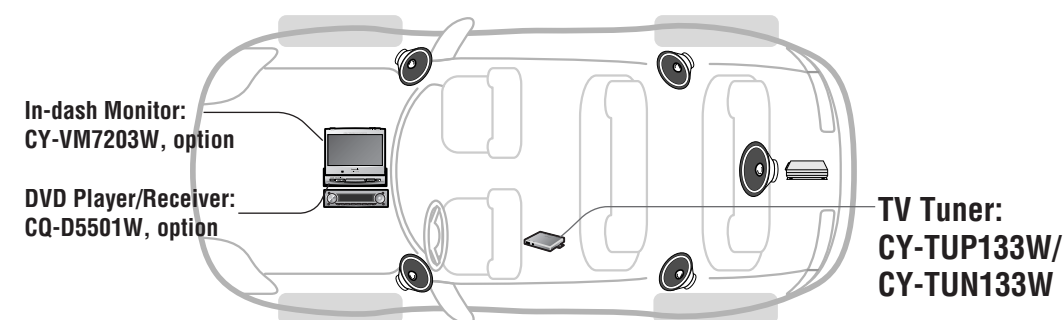
Head Unit with Touch Panel Control (CQ-VD7003W, CQ-VD6503W) and TV
Tuner



Note:

- Connect this unit to the Head Unit (CQ-VD7003W, CQ-VD6503W, option) with the Head Unit/Expansion Module Connecting Cable and RCA cord (video) (supplied). (page 24, 25)

In-dash Monitor (CY-VM7203W) and TV Tuner



Note:

- Connect this unit to the In-dash Monitor (CY-VM7203W, option) with RCA cord (video, audio, remote) (supplied). (page 26)

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iPod®

iPod is a trademarks of Apple Computer, Inc., registered in the U.S. and other countries.

Names of Controls and Terminals

TV Tuner Unit

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TV ANT IN

Terminal for connecting TV antennas (option)

TV OUT

Terminal for connecting a In-dash Monitor (CY-VM7203W, option).

REMOTE IN (Black)

Terminal for connecting a Head Unit's remote output terminal.

TO HEAD UNIT/EXPANSION MODULE (System-up connector)

Terminal for connecting a Head Unit (CQ-VD7003W, CQ-VD6503W, option)/Expansion Module (CY-EM100N, option).

VIDEO (Yellow)

Connect RCA cord to the video input terminal of the Head Unit when connecting Head Unit/Expansion Module Connecting Cable to the Head Unit.

L (White) R (Red)

POWER SUPPLY

Terminal for connecting to the power connector

Remote Control Unit

Note:

- Point the emitter of the remote controller at the Head Unit or the monitor.

[PWR] (Power)

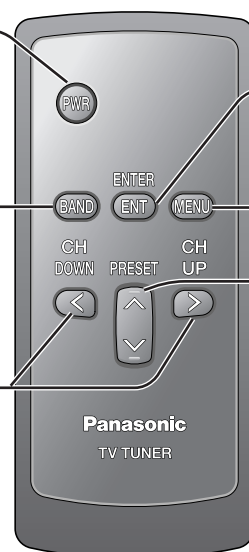
- Switches on/off the power. (page 16)

[BAND]

- Selects TV band. (page 16)
- Searches for channels and memorizes them automatically. (page 17)

[<] (CH DOWN) [>] (CH UP)

- Selects an operation or item. (page 15)
- Selects or searches the channel. (page 16)



[ENT] (ENTER)

- Determines an operation or item. (page 15)
- Shows TV channel display. (page 16)

[MENU]

- Shows the menu screen. (page 15)

[^] [v] (PRESET)

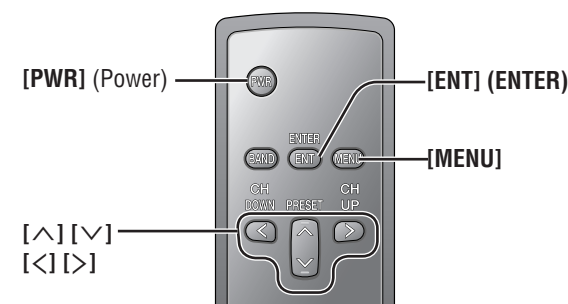
- Selects DIVER or TV AREA setting. (page 15) **(Only for CY-TUP133W)**
- Selects the preset channel. (page 17)
- Sets the preset channel writing/deleting mode. (page 17)

DIVER and TV AREA Settings

TV AREA Setting is only for CY-TUP133W

Refer to page 8 about the TV AREA (Country) setting. Refer to page 10 about the DIVER (Diversity) Antenna setting.

Read the explanation on this page as required.



Group and TV AREA (Country)

Group	TV AREA (Country)
GROUP1	Algeria, Bahrain, Ghana, India, Israel, Jordan, Kenya, Kuwait, Liberia, Malaysia, Maldives, Nigeria, Oman, Pakistan, Qatar, Singapore, Srilanka, Sudan, Thailand, UAE, Uganda, Yemen, Zambia
GROUP2	Russia
GROUP3	Italy
GROUP4	Rumania, Hungary, Czech
GROUP5	Ireland
GROUP6	Hong Kong
GROUP7	Angola
GROUP8	Australia
GROUP9	China
GROUP10	Indonesia
GROUP11	New Zealand
GROUP12	South Africa

Note:

- Only English is displayed on the OSD screen.
- AREA SELECT can be used to select countries other than those where the product is distributed, but this product is not compatible with those countries. (They are shaded gray in the list.)

DIVER (Diversity) Antenna Setting

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Diversity TV Antenna:

Of the two antennae connected to the system, the one with the best reception is automatically selected for TV reception. Turning DIVER (Diversity) setting to "ON" reduces noise.

Confirm "ON" to receive a good reception.

Default: ON

Setting: ON/OFF

- Press [PWR] (Power).
- Press [MENU].



- Press [^] or [v] to select "DIVER". **(Only for CY-TUP133W)**
- Press [<] or [>] to select "ON" or "OFF".
- Press [ENT] (ENTER) or [MENU] to set and return to the previous display.

Only for CY-TUP133W

TV AREA (Country) Setting

TV AREA:

TV reception area is consisted of 12 group.

See the left table to select the group where you operate this unit.

Setting: GROUP1 to GROUP12

- Press [PWR] (Power).
- Press [MENU].

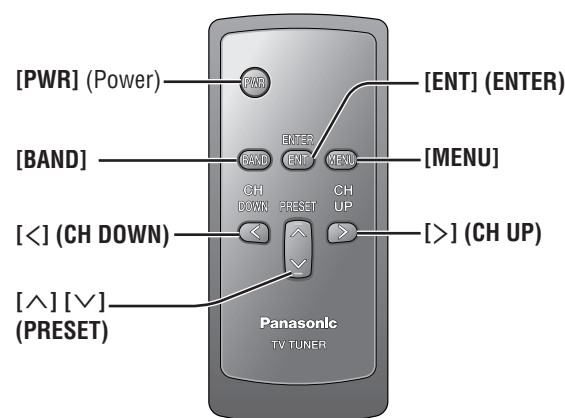


- Press [^] or [v] to select "TV AREA".
- Press [<] or [>] to select the group included your country. (See the left table.)
- Press [ENT] (ENTER) or [MENU] to set and return to the previous display.

Basic TV Operation

15

Refer to the CQ-VD7003W and CQ-VD6503W instruction manuals for information on TV operation on the CQ-VD7003W and CQ-VD6503W touch panel and remote control.



Power

Turn your car's ignition key to the ACC or ON position.
ON: Press [PWR] (Power).
OFF: Press [PWR] (Power) again.

Note:

- When changing the source to TV tuner on Head Unit (CQ-VD7003W, CQ-VD6503W, etc.), the power is turned on automatically.

Band Selection

Press [BAND].

TV1 ↔ TV2

Note:

- TV2 is provided to allow more preset channels in memory.

Channel Selection

Press [<] (CH DOWN) or [>] (CH UP).

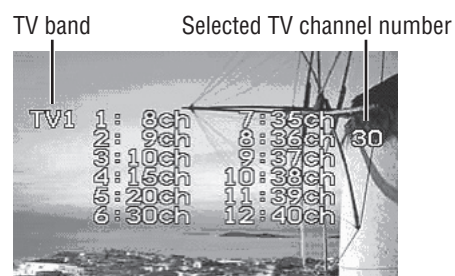
[>] (CH UP): Higher channel number
 [<] (CH DOWN): Lower channel number

Press and hold [<] (CH DOWN) or [>] (CH UP) for more than 0.5 seconds, then release it. Seeking will start.

TV Channel Display

Press [ENT] (ENTER).
 Press [ENT] (ENTER) again to display off.

Example: When preset channel is not set.



Note:

- Only English is displayed on the OSD screen.
- Background of the display becomes blue when the unit cannot get a good reception on the TV.

Channel Preset

16

Warning

- To ensure safety, never attempt to preset channels while you are driving.

- Up to 12 channels can be stored in each of the TV1 and TV2 band selections.
- TV2 is provided to allow more preset channels in memory. Channels that could not be placed in memory on the Band TV1 can be placed on the Band TV2.
- If Band TV1 is sufficient to hold all desired channels, they should usually be preset to that band.

Note:

- New channels overwrite existing saved stations after these procedures.

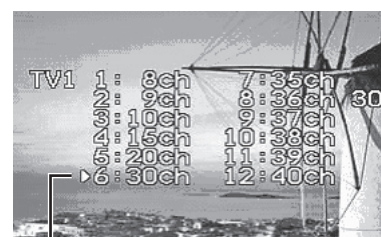
Auto Preset Channel Memory

With this operation, channels with good receiving conditions can be automatically stored in the preset memory.

- Press [BAND] to select the TV band.
- Press and hold [BAND] for more than 2 seconds. 12 channels with first to 12th highest in signal strength will be preset to each band. (They are listed in order, from the earliest channel number.)

Preset Channel Calling

- Press [BAND] to select the TV band.
- Press [^] or [v] (PRESET).



Selected preset channel number

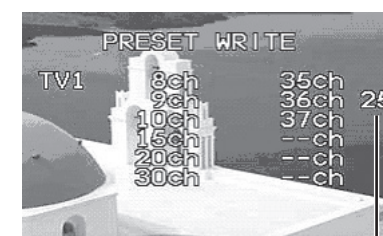
Writing Preset Channel (PRESET WRITE)

Favorite channels can be written after you have set the preset channel once.

Example:

The 25 channel is written in the TV1 preset channel list.

- Press and hold [^] (PRESET) for more than 2 seconds. Preset channel writing mode display appears.
- Press [<] (CH DOWN) or [>] (CH UP) to select channel you want to write.



TV channel you want to write

- Press [ENT] (ENTER) or [BAND] to set.
- Press [MENU] to exit the preset channel writing mode.

Deleting Preset Channel (PRESET DELETE)

Channels can also be deleted from the presets when no longer required.

Example:

The 30 channel is deleted in the TV1 preset channel list.

- Press and hold [v] (PRESET) for more than 2 seconds. Preset channel deleting mode display appears and preset 1 channel is received.
- Press [^] or [v] (PRESET) to select preset channel you want to delete.



Preset channel you want to delete

- Press [ENT] (ENTER) or [BAND] to set.
- Press [MENU] to exit the preset channel deleting mode.

Installation

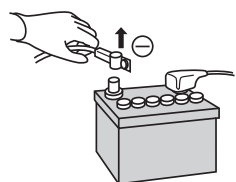
17

Preparation

⚠ Caution

- Please follow the laws and regulations of your province or country for installation of the unit.
- We strongly recommended you to wear gloves for installation work to protect yourself from injuries.

- Disconnect the cable from the negative (–) battery terminal (see caution below).



⚠ Caution

- If your car is equipped with air bag and/or anti-theft systems specific procedures may be required for connection and disconnection of the battery to install this product.
- Before attempting installation of this electronic component contact your car dealer or manufacturer to determine the required procedure and strictly follow their instructions.
- FAILURE TO FOLLOW THE PROCEDURE MAY RESULT IN THE UNINTENDED DEPLOYMENT OF AIR BAGS OR ACTIVATION OF THE ANTI-THEFT SYSTEM RESULTING IN DAMAGE TO THE VEHICLE AND PERSONAL INJURY.

Installation Precautions

This unit should be installed by a professional installer. In case of difficulty, please consult your nearest authorized Panasonic Service Center.

- 1 This system is to be used only in a 12 V DC battery system (car) with negative ground.
- 2 Follow the electrical connections carefully (page 22). Failure to do so may result in damage to the unit.
- 3 Connect the power lead after all other connections are made.
- 4 Be sure to connect the battery lead (yellow) to the positive terminal (+) of the battery or fuse block (BAT) terminal.
- 5 Insulate all exposed wires to prevent short circuiting.
- 6 Secure all loose wires after installing the unit.
- 7 Please carefully read the operating instructions of the respective equipment before connecting it to this unit.

Installation Hardware (For Installation)

No.	Item	Diagram	Qty.
①	Tapping Screw ($\phi 5 \times 16$ mm) (XTT5+16AFZ)		4
②	Velcro Tape (YFX999C135ZA)		2

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Installation Hardware (For Wiring)

No.	Item	Diagram	Qty.
③	Power Connector (YEAJ012884)		1
④	Head Unit/Expansion Module Connecting Cable (3 m) (YEAJ071812) (for Expansion Module)		1
⑤	RCA Cord (3 m) (YEAJ071819) (for video connector)		1
⑥	RCA Cord (3 m) (YEAJ071820) (for audio connector)		1
⑦	RCA Cord (3 m) (YEAJ071821) (for remote control connector)		1
⑧	Clip Connector (YEAT034C012)		1

Note:

- The number in parenthesis underneath each accessory part name is the part number for maintenance and service.
- Accessories and their parts numbers are subject to modification without prior notice due to improvements.
- Use the supplied screws for installation exclusively. In case of losing any of them, please order the specific screw.

Installation (continued)

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Mounting the Tuner Unit

⚠ Caution

- Never mount the unit in any of the following locations to avoid damage due to overheating;
 - Near the heater port.
 - Places like the dashboard or rear deck, where it may be exposed to direct sunlight.
- Do not mount the unit near the door, where it could be exposed to rain.
- You run the risk of interfering with the mounting or causing damage by drilling into the gas tank, a wiring harness, or other component.

For mounting the unit on inclined surface, Velcro tape fixation is too weak, and screw fixation is recommended.

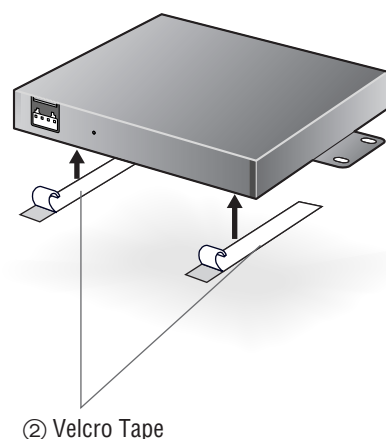
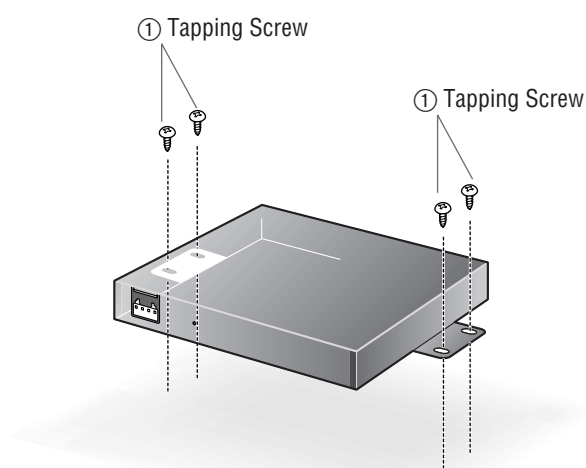
Note:

- Apply an anticorrosive to the holes and tapping screws.
- Keep a safe distance between the unit and other electronic equipment.

Unit Installation by using the Tapping Screw ①. (Recommended)

Mount the unit on the car carpet by using Velcro tape ②.

Attach the seal side of the Velcro Tape ② to the unit, then mount the unit on the carpet.



Note:

- Some carpet materials may not be suitable for this mounting method. In this case, please contact your nearest Panasonic Service Center for installation.

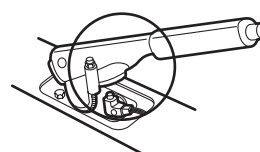
20

Connecting the Parking Brake (Side Brake) Connection Lead

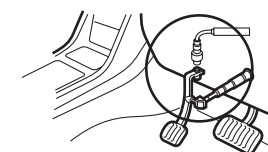
⚠ Caution

- For safety, be sure to ask your nearest professional installer to do this connection.

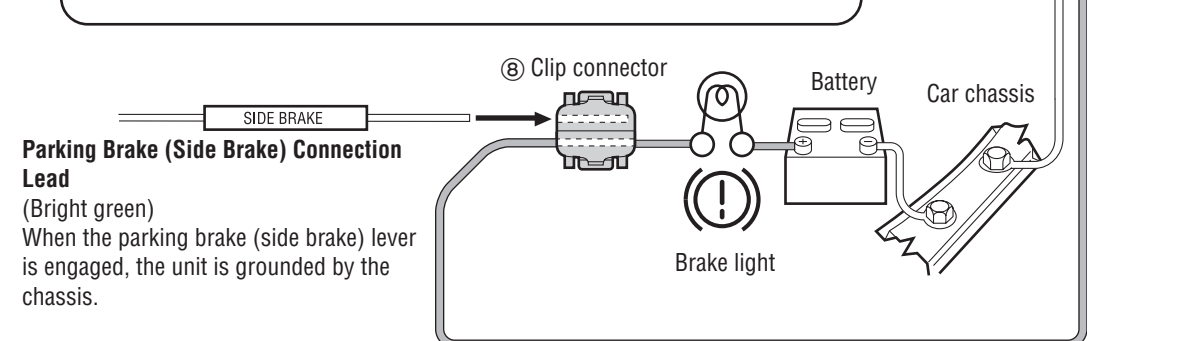
Hand brake



Foot brake

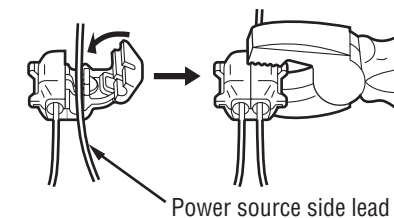
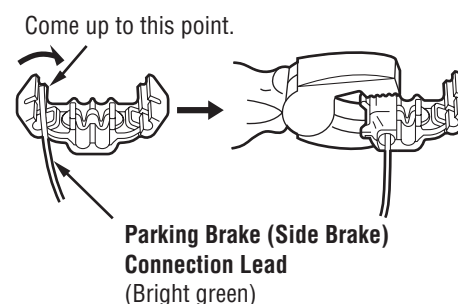


The parking brake (side brake) switch position varies with the car model. For details on the exact location of the parking brake (side brake) switch in your car, contact your dealer.



- ① Attach a Clip Connector ⑧ to the end of the parking brake (side brake) connection lead.

- ② The Clip Connector ⑧ is connected to the power source side lead of the parking brake (side brake) lever.



Electrical Connections

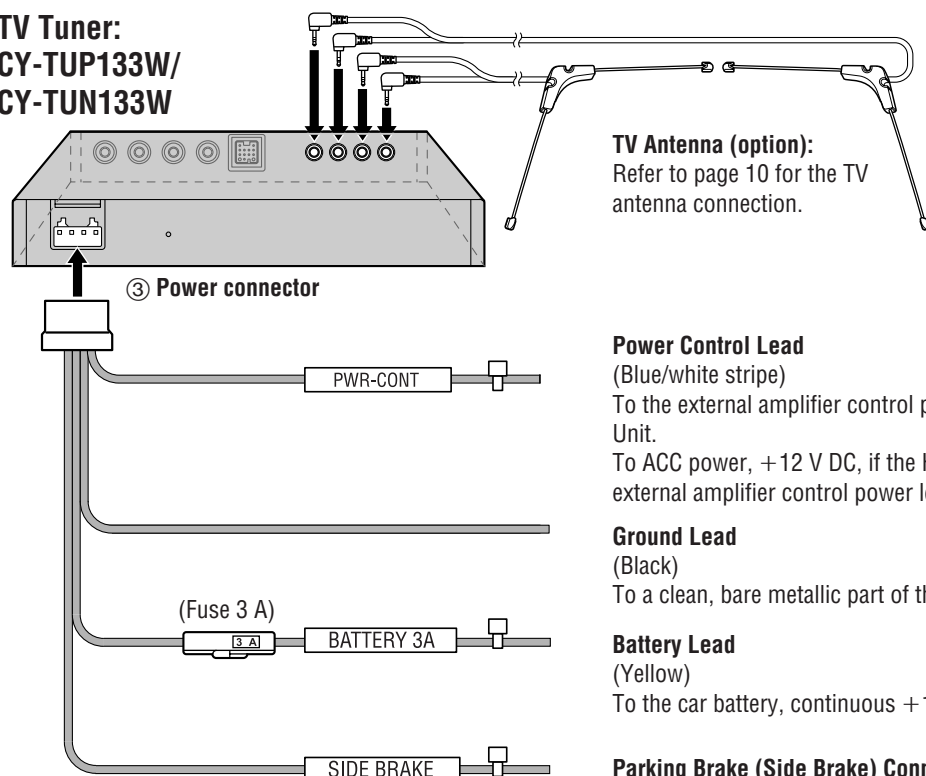
21

Wiring Diagram

⚠ Caution

- This unit is designed for use in a car having a 12 V negative ground battery system.
- To prevent damage to the unit, be sure to follow the connection diagram.
- Do not insert the power connector into the unit until the wiring is completed.
- Be sure to insulate any exposed wires to prevent short circuiting with the car chassis. Bundle all cables, and prevent cable terminals from touching any metal parts.
- Note that if your car has a driving computer or a navigation computer, disconnecting the cable from the battery may clear the memory.
- Run the cords avoiding the spots where the temperature can be extremely high.
- Fit a vinyl cap over unused connection terminals, to prevent contact with metal parts etc.

TV Tuner: CY-TUP133W/ CY-TUN133W



Power Control Lead

(Blue/white stripe)

To the external amplifier control power lead of the Head Unit.

To ACC power, +12 V DC, if the Head Unit has no external amplifier control power lead.

Ground Lead

(Black)

To a clean, bare metallic part of the car chassis.

Battery Lead

(Yellow)

To the car battery, continuous +12 V DC.

Parking Brake (Side Brake) Connection Lead

(Bright green)

Be sure to wire the parking brake (side brake) for safety and preventing accidents.

Note:

- Strip about 5 mm of the lead ends for connection.
- Be sure to fully plug in the connectors. Secure them with clamps and tapes.
- All other installation methods require the use of dedicated metal fittings. Consult with a qualified servicing engineer or your dealer if other methods are required.

If the Expansion Module (CY-EM100N, option) is not connected and the ACC is not mounted on the vehicle:

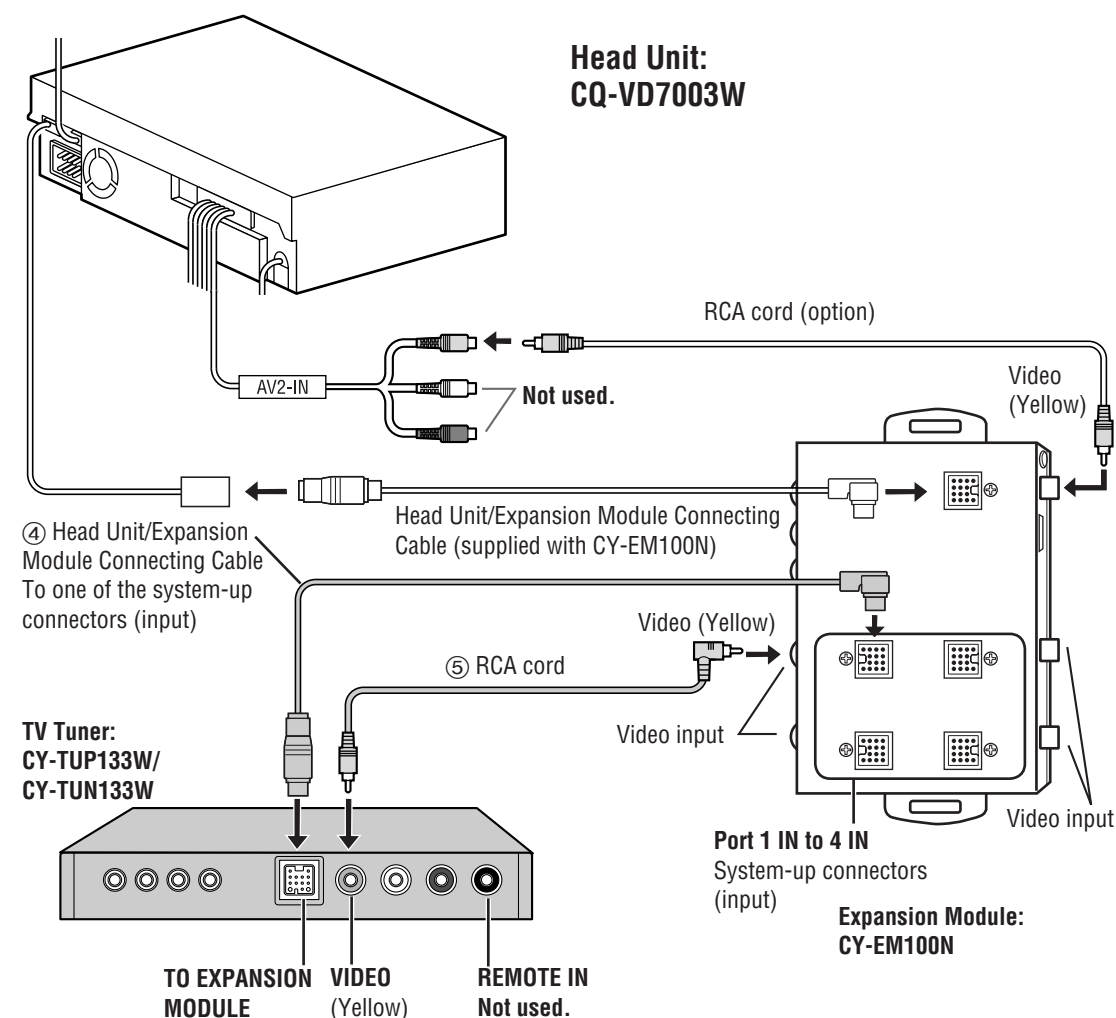
- Connect the power control lead of this unit to the external amplifier control power lead of the Head Unit. If this connection is not made, the battery will run down.
- Before turning off the car engine, first use the remote control to turn off the power for the unit before turning off the power for the In-dash Monitor CY-VM7203W.

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This unit cannot be operated alone.

This unit is designed for users to connect one or more system devices to Panasonic car audio/AV unit at the same time.

Connecting with Head Unit (CQ-VD7003W) and Expansion Module (CY-EM100N)



Note:

- Refer to individual instruction and installation manuals for each device for detailed installation and wiring.
- Connect this unit to the Expansion Module (CY-EM100N, option) with the Head Unit/Expansion Module Connecting Cable and RCA cord (video) (supplied).
- When the device that provides video output is connected to the System-up Connector, connect the video cable to input connector below the port to which the System-up Connector is connected.

Note for the Head Unit remote control unit (page 11):

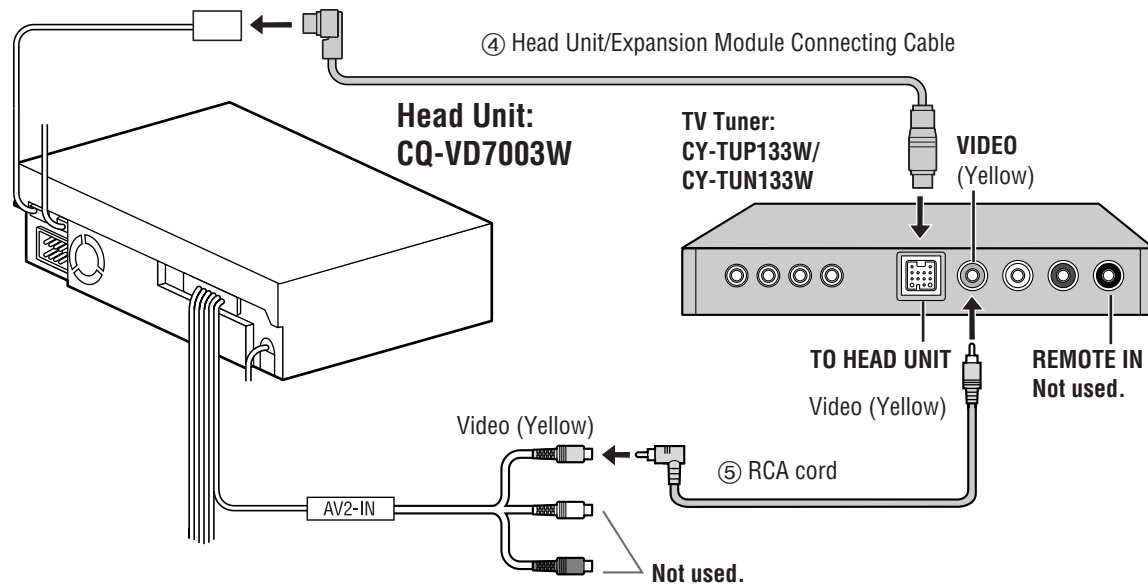
- With some Head Units, the Head Unit remote control unit may not have buttons intended specifically for TV operation, so some operations cannot be used for TV operation. But that does not mean that the tuner or the Head Unit are malfunctioning.

Electrical Connections (continued)

23

Head Unit with System up Connector

Connecting with Head Unit (CQ-VD7003W)



Note:

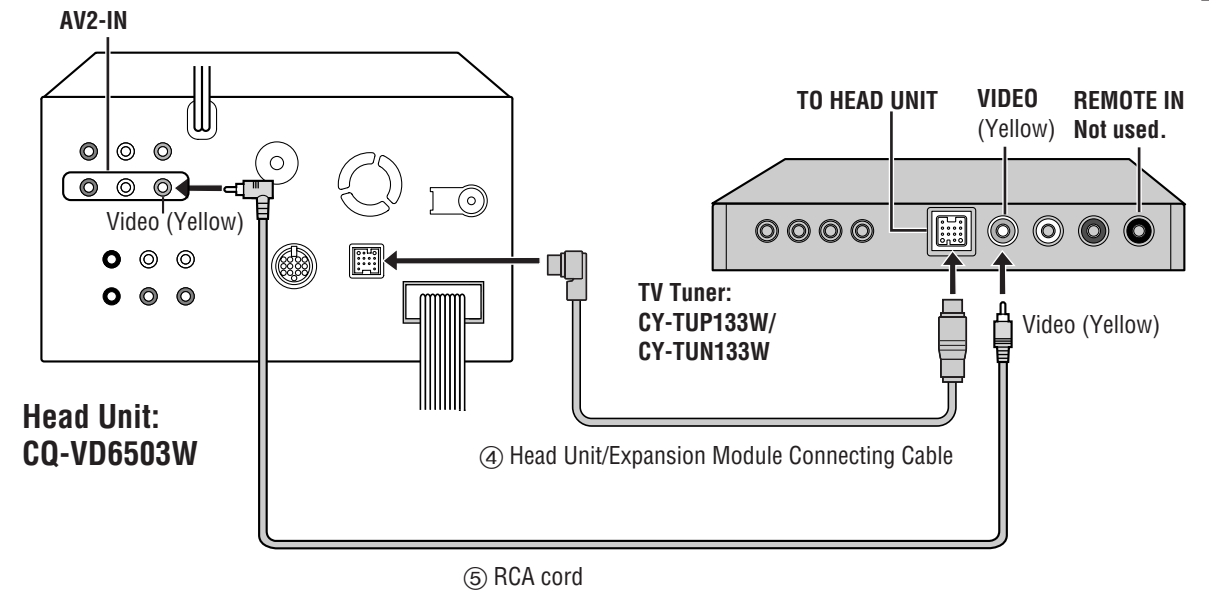
- Refer to individual instruction and installation manuals for each device for detailed installation and wiring.
- Connect this unit to the Head Unit (CQ-VD7003W, option) with the Head Unit/Expansion Module Connecting Cable and RCA cord (video) (supplied).

Note for the Head Unit remote control unit (page 11):

- With some Head Units, the Head Unit remote control unit may not have buttons intended specifically for TV operation, so some operations cannot be used for TV operation. But that does not mean that the tuner or the Head Unit are malfunctioning.

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Connecting with Head Unit (CQ-VD6503W)



Note:

- Refer to individual instruction and installation manuals for each device for detailed installation and wiring.
- Connect this unit to the Head Unit (CQ-VD6503W, option) with the Head Unit/Expansion Module Connecting Cable and RCA cord (video) (supplied).

Note for the Head Unit remote control unit (page 11):

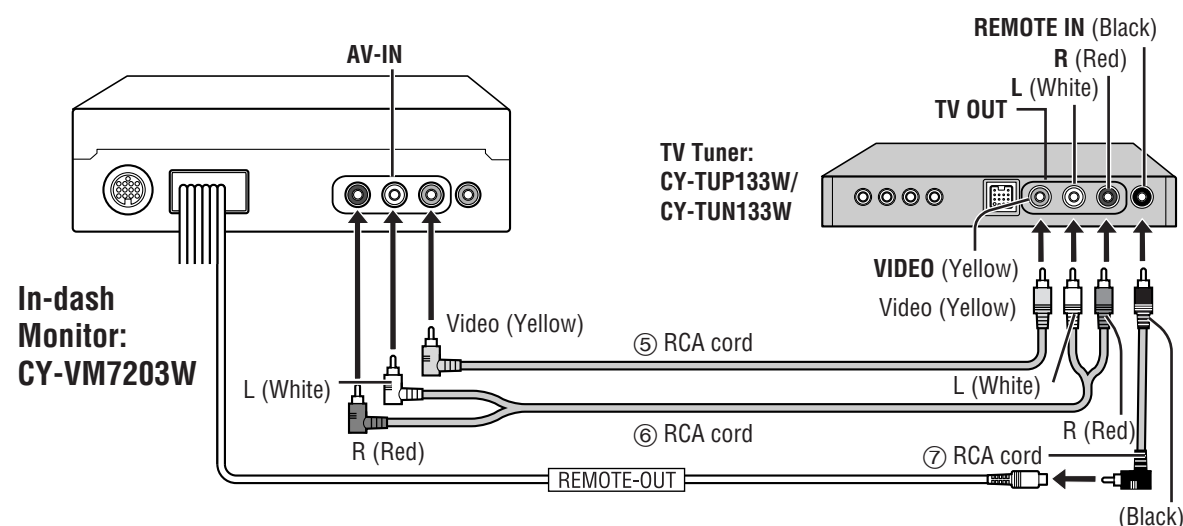
- With some Head Units, the Head Unit remote control unit may not have buttons intended specifically for TV operation, so some operations cannot be used for TV operation. But that does not mean that the tuner or the Head Unit are malfunctioning.

Electrical Connections (continued)

25

Head Unit without system up connector

Connecting with In-dash Monitor (CY-VM7203W)



Note:

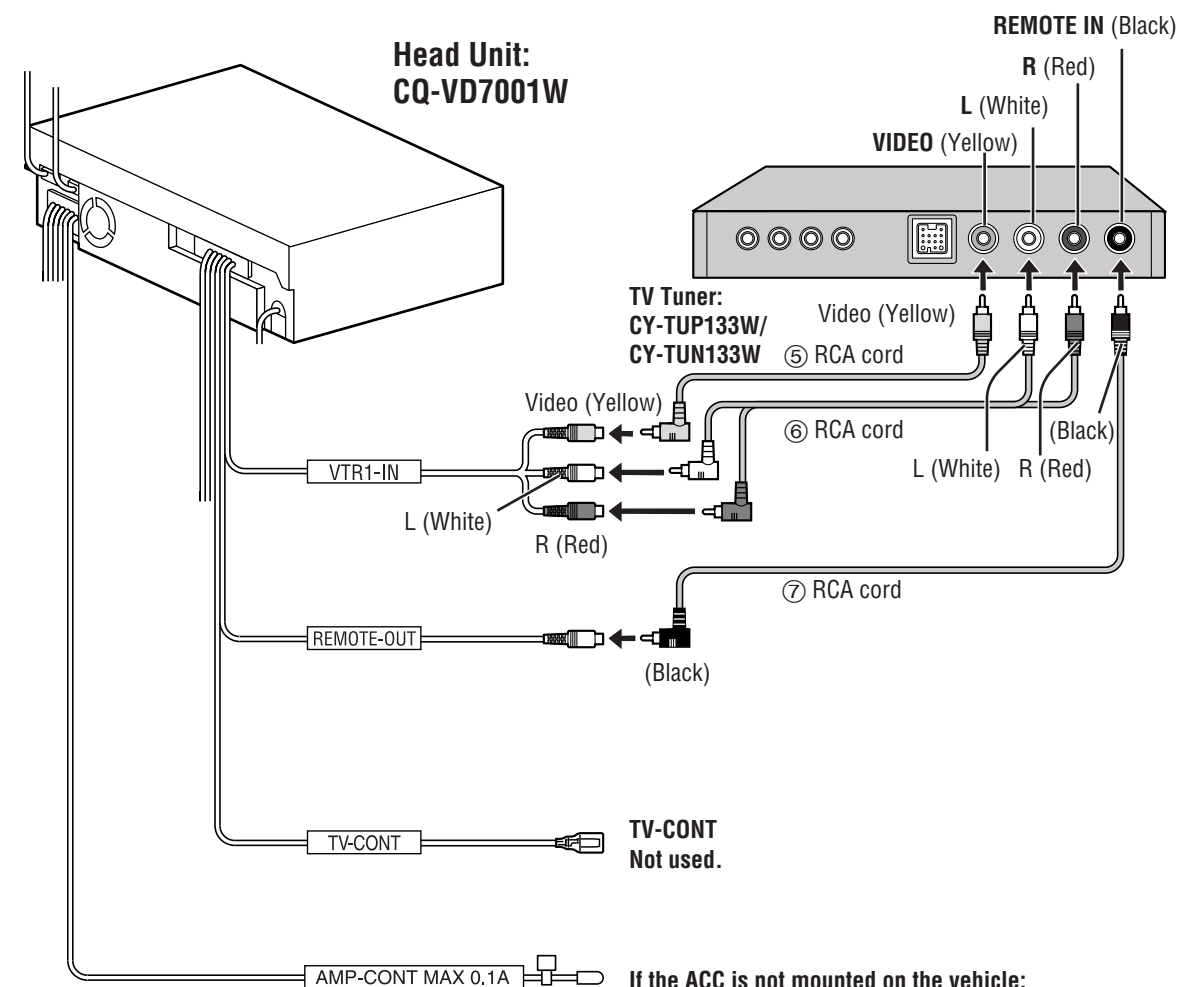
- Refer to individual instruction and installation manuals for each device for detailed installation and wiring.
- Connect this unit to the In-dash Monitor (CY-VM7203W, option) with RCA cord (video, audio, remote) (supplied).

If the ACC is not mounted on the vehicle:

- Before turning off the car engine, first use the remote control to turn off the power for the unit before turning off the power for the In-dash Monitor CY-VM7203W.

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Connecting with Head Unit (CQ-VD7001W)



Note:

- Refer to individual instruction and installation manuals for each device for detailed installation and wiring.
- Connect this unit to the Head Unit (CQ-VD7001W, option) with RCA cord (video, audio, remote) (supplied).

If the ACC is not mounted on the vehicle:

- Connect the power control lead of this unit to the external amplifier control power lead of the Head Unit. If this connection is not made, the battery will run down.

Troubleshooting

If You Suspect Something Wrong

27 Check and take steps as described below.

If the described suggestions do not solve the problem, it is recommended to take the unit to your nearest authorized Panasonic Service Center. The product should be serviced only by qualified personnel. Please refer checking and repair to professionals.

Panasonic shall not be liable for any accidents arising out of neglect of checking the unit or your own repair after your checking.

Never take measures especially those other than indicated by *italic* letters in “Possible solution” described below because those are too dangerous for users to handle themselves.

Warning

- Do not use the unit in abnormal condition, for example, without sound, or with smoke or foul smell, which can cause ignition or electric shock. Immediately stop using the unit and consult your dealer.
- Never try to repair the unit by yourself because it is dangerous to do so.

Common

Problem	Possible cause → Possible solution
No power to the unit.	<p>The power cord (battery, power control and ground) is connected in the wrong way. → Check the wiring.</p> <p>Fuse blows out. → Eliminate the cause of fuse blowout and replace the fuse with new one. Consult your dealer.</p>
Noise.	<p>There is an electromagnetic-wave generator such as a cellular phone near the unit or its electrical lines. → Keep the electromagnetic-wave generator such as a cellular phone away from the unit and the wiring of the unit. If noise cannot be eliminated due to the wiring harness of the car, consult your dealer.</p> <p>The contact of the ground lead is poor. → Make sure that the ground lead is connected to an unpainted part of the chassis securely.</p>
Noise is made in step with engine revolutions.	<p>Alternator noise comes from the car. → Change the wiring position of the ground lead. → Mount a noise filter on the power supply.</p>
Some operations are not executable.	<p>Some operations are not executable in particular modes such as menu mode. → Read the operating instructions carefully and cancel the mode. If the unit is still out of order, consult your dealer.</p>

Common (continued)

Problem	Possible cause → Possible solution
Poor reception or noise. TV stations cannot be received.	<p>DIVER (Diversity) antenna setting is set to “OFF”. → Set “ON” to receive a good reception.</p> <p>Only for CY-TUP133W The group on “TV AREA” is not selected correctly. → Select the group where you operate this unit. (See table on page 15.)</p> <p>Antenna installation or wiring of antenna cable is faulty. → Check whether the antenna mounting position and its wiring are correct. In addition, check to see whether the antenna ground is securely connected to the chassis.</p>
The power of the unit fails unintentionally.	<p>The safety device works. → Consult your dealer, or your nearest Panasonic Service Center.</p>
The number of auto preset channels is less than 12.	<p>The number of receivable stations is less than 12. → Move to an area where receivable channels number is maximum, and try presetting.</p>
Preset channels cannot be stored.	<p>→ Confirm the operation of the presetting, and preset channels again.</p> <p>The contact of the battery lead is poor, or the battery lead is not always powered. → Make sure that the battery lead is connected securely, and preset channels again.</p>

Remote Control Unit

Problem	Possible cause → Possible solution
No response to pressing buttons.	<p>The battery is inserted in the wrong direction. A wrong battery is inserted. → Insert a correct battery in the correct direction.</p> <p>The battery is weak. → Replace the battery with new one.</p> <p>The aiming direction of the remote control unit is wrong. → Aim the remote control unit at the sensor of the Head Unit and press buttons.</p> <p>The wiring is in the wrong way. → Check the wiring of the Head Unit/Expansion Module connecting cable when the Head Unit is CQ-VD7003W, CQ-VD6503W (option). → Check the wiring of RCA cord (remote) when the In-dash Monitor CY-VM7203W (option) is connected.</p> <p>The sensor is exposed to direct sunlight. (The remote control unit may not be operable when the sensor is exposed to direct sunlight, In such a case, the system is not faulty.) → Block off sunlight to the sensor.</p>

Troubleshooting (continued)

Product Servicing

29 If the suggestions in the charts do not solve the problem, we recommend that you take it to your nearest authorized Panasonic Service Center. The product should be serviced only by a qualified technician.

Replacing the Fuse

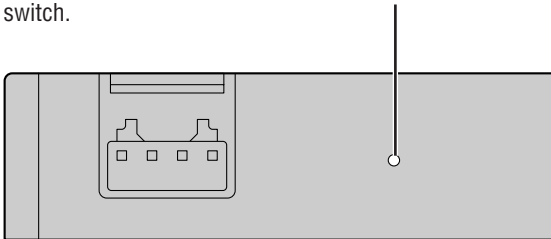
Use fuses of the same specified rating (**3 A**). Using different substitutes or fuses with higher ratings, or connecting the unit directly without a fuse, could cause fire or damage to the unit.

If the replacement fuse fails, contact your nearest Panasonic Service Center for service.

If the Unit Fails to Operate

Reset switch

Insert a hard, slender stick into the hole and push the switch.



IMPORTANT

Press the switch only when the unit fails to operate with any buttons. (Stored settings and adjustments are not cleared.) If the unit fails to return to normal condition, call the nearest Panasonic Service Center and ask for repairs.

Tuner for Analog TV only

This unit is not compatible with digital television broadcasts.

Transition from analog TV broadcasts to digital TV broadcasts:

Digital television broadcasts have begun in some countries and regions. They are scheduled to spread gradually into other countries and regions.

Impact on this unit:

Some countries and regions are gradually changing analog TV broadcast channels to secure the broadcast channels required for the start of digital TV broadcasting.

Therefore, the following effects are anticipated, but they are not defects of this unit:

- It may become impossible to receive broadcasts of previously memorized channels.
- A previously memorized channel may start receiving a different television station.
- Some channels may be selected (memorized) for which the image cannot be displayed.

Remedy:

Check this instructions and re-select the channels (change those memorized).

Specifications

General

Power supply:	DC 12 V (11 V–16 V), test voltage 14.4 V, negative ground
Current consumption:	Less than 0.5 A
Video output signal:	Composite video signal, 1.0 Vp-p (75 Ω)
Audio output signal:	1 Vrms at 400 Hz (With 100 % modulation)
Dimensions (W×H×D):	156×22.5×150 mm
Weight:	650 g

TV Section

Usable Sensitivity:	36 dB/μV
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Note:

- Specifications and design are subject to modification without notice due to improvements.
- Some figures and illustrations on this manual may be different from your product.